

ABSTRACT

A silver-based alloy thin film is provided for the highly reflective or the semi-reflective layer of optical discs. Alloy additions to silver include gold, rhodium, ruthenium, osmium, platinum, palladium, copper, silicon, cadmium, tin, lithium, nickel, cobalt, manganese, indium, chromium, antimony, gallium, boron, molybdenum, zirconium, beryllium, titanium, aluminum, germanium and zinc. These alloys have moderate to high reflectivity and reasonable corrosion resistance in ambient environments.